

Retrospective Analysis of Adnexal Masses in Post Hysterectomy Status

D. Sri Thejaa^{1*}, Reethu Varadarajan²

¹Junior Resident, Department of Obstetrics and Gynecology, KIMS Hospital, Bangalore, India

²Associate Professor, Department of Obstetrics and Gynecology, KIMS Hospital, Bangalore, India

*Corresponding author: theju2290@gmail.com

Abstract: This paper presents a retrospective analysis of adnexal masses in post hysterectomy status.

Keywords: Post hysterectomy, Ovarian mass, Adnexal mass.

1. Aims and Objectives

To characterize and analyse adnexal lesions detected in patients who had undergone previous hysterectomy with one or both ovaries conserved, and also to define the clinical, pathological, and surgical characteristics of adnexal lesions in those patients.

2. Materials and Methods

A retrospective observational study was conducted on patients who had underwent a previous hysterectomy with one or both ovaries preserved and who had subsequently presented with an adnexal lesion, characteristics of lesions, operative findings, and pathological findings in patients who required a re-operation were noted.

3. Introduction

- Hysterectomy is one of the most common surgeries performed.
- Adnexal or pelvic masses are common reasons women require further surgery following hysterectomy and their frequency may depend upon whether total, partial or no adnexectomy is performed at hysterectomy.
- Salpingectomy at the time of hysterectomy has emerged as a safe, low risk technique to decrease the risk of needing future surgery for benign adnexal masses and most importantly, ovarian cancer risk.
- Pelvic masses after hysterectomy can arise from conserved ovaries, ovarian remnants, fallopian tubes, broad ligament, retroperitoneal space, bladder and bowel.
- Ultrasonography has proved a remarkable diagnostic tool which not only help to determine origin but also suggest features which distinguish between benign and malignant masses.
- Limited data is available in literature which addresses this problem in gynaecological patients. The purpose of this

study was to share our experience on the nature of pelvic masses which appear after hysterectomy for benign diseases in our population along with its management.

- **Study Setting:** Department of obstetrics and gynecology, Kempegowda Institute of medical Sciences, Bangalore.
- **Study Design:** Retrospective study.
- **Study Period:** 5 Years.
- **Inclusion Criteria:** Women with history of hysterectomy who underwent surgery for adnexal mass.
- **Exclusion Criteria:** Patients whose adnexal masses regresses on follow up.
- **Ethical Aspects and Issues:** No extra cost is involved in the study.

4. Results

- In this retrospective study of 5 years 39 patients age ranging between 35-70 years who had underwent hysterectomy previously by abdominal (30) 77% and (7)18%by vaginal route and laproscopic (2) 5%.
- Most of them had undergone hysterectomy with bilateral salpingectomy of about (21) 53.8% had come with adnexal masses of ovarian origin of (34)87.2% and (5)12.8% of tubal origin.
- Of these ovarian masses (33) 84.6% were benign and 2.56% (1) were malignant.
- Among benign ovarian masses based on histopathological reports most of them diagnosed pathologically serous cystadenoma (17) 51.5% followed by mucinous cystadenoma (8) 24.2%, dermoid (3) 9%, follicular cyst (3) 9%, endometrioma (2) 6%.
- Most of the patients are presented with adnexal mass of an interval of 3 to 5 years (17)43.5% of post hysterectomy.

Table 1

Indications for hysterectomy

| Indications for previous Hysterectomy | No. cases | Percentage |
|---------------------------------------|-----------|------------|
| Abnormal uterine bleeding | 8 | 20% |
| leiomyoma | 20 | 51.2% |
| Ovarian cyst | 5 | 12.8% |
| Adenomyosis | 3 | 7.69% |
| Prolapse | 4 | 10.2% |

Table 2
Type of surgery performed

| | No. cases | Percentage |
|--|-----------|------------|
| Hysterectomy alone | 3 | 7.69% |
| Hysterectomy with bilateral salpingectomy | 21 | 53.8% |
| Hysterectomy with unilateral salpingo-oophorectomy | 15 | 38.4% |

Table 3
Types of Hysterectomy

| Types of Hysterectomy | No. cases | Percentage |
|-----------------------|-----------|------------|
| Abdominal | 30 | 77% |
| Vaginal | 7 | 18% |
| laproscopic | 2 | 5% |

Table 4
Intraoperative findings

| Intra op findings | No. cases | Percentage |
|-------------------|-----------|------------|
| Ovarian Benign | 33 | 84.6% |
| Malignancy | 1 | 2.56% |
| Fallopian tube | 5 | 12.8% |

Table 5
Histopathology

| Ovarian origin | No. of cases | Percentage |
|--------------------------------|--------------|------------|
| Benign | | |
| 1) Serous cystadenoma | 17 | 51.5% |
| 2) Mucinous cystadenoma | 8 | 24.2% |
| 3) Dermoid cyst | 3 | 9% |
| 4) Follicular cyst | 3 | 9% |
| 5) Endometrioma | 2 | 6% |
| Malignant | | |
| 1) Mucinous cystadenocarcinoma | 01 | 100% |

Table 6

| Previous hysterectomy performed when | No. cases | Percentage |
|--------------------------------------|-----------|------------|
| < 3 years | 9 | 23% |
| 3-5 yrs | 17 | 43.5% |
| >5 years | 13 | 33.3% |

5. Discussion

- In this review, 39 women with a history of hysterectomy returned with adnexal masses requiring surgery most masses were benign, arising from ovarian tissue.
- Most of these patients are with mean age of 42.5 years have undergone hysterectomy previously presented with adnexal masses.
- Bilateral salpingectomy at the time of hysterectomy has been advocated in recent years as an intervention that can provide benefit in decreasing the risk of serous carcinoma as well as benign pathology that may require future surgery.
- This procedure has been shown to be efficient and safe, adding minimal procedural time and virtually no risk
- This consensus that fallopian tube removal with

hysterectomy should be considered for all women.

- Abdominal hysterectomy is still the commonest approach even if pre-requisite for vaginal approach are fulfilled.
- At laparotomy ovarian tumours were excised. In suspected malignancy staging and debulking were carried out. After histopathology report malignant cases were referred to oncology department.
- Salpingectomy was carried out for hydrosalpinx.
- Oophorectomy after menopause is a standard procedure with hysterectomy but it is technically more difficult with vaginal hysterectomy.
- Common practice is to leave healthy ovaries behind if vaginal hysterectomy is performed in post-menopausal women for prolapse.

6. Conclusion

- This study provides additional information regarding what brings women back for re operation for adnexal masses following hysterectomy and this is important in discussing the long term benefits and risks of hysterectomy with no, partial or bilateral adnexectomy.
- It also states that most of them are benign masses which were ovarian in origin and though routine salpingectomy at hysterectomy can decrease the potential risk of repeat surgery for masses of tubal origin, it is unlikely to affect the majority of future reoperations for post-hysterectomy adnexal masses.
- That said, we agree with current guidelines that strongly support routine salpingectomy at hysterectomy and sterilization as a strategy to decrease ovarian cancer.

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